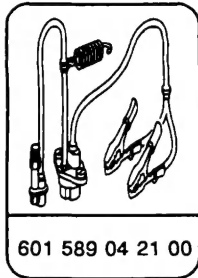


Engine 601
1984

Test values

Idle speed rpm	750 ± 50
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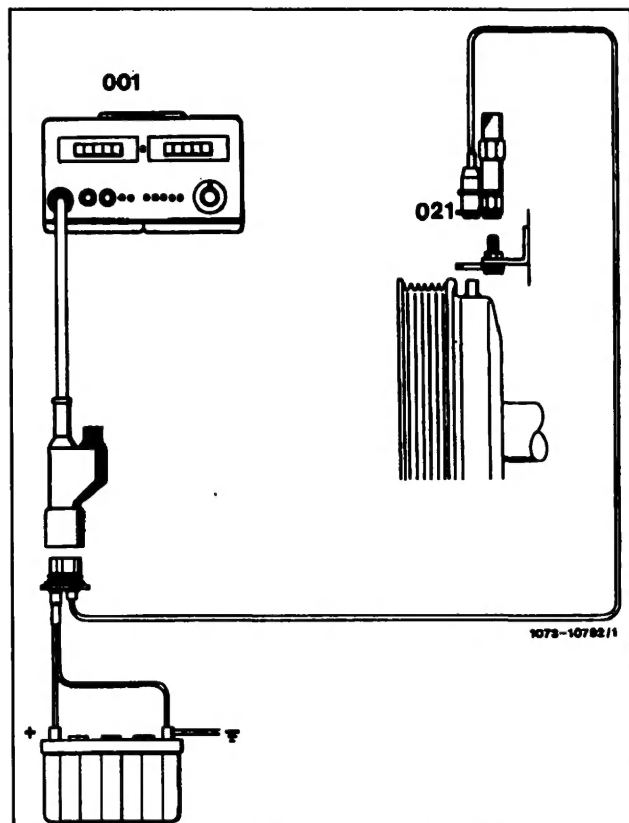
Special tool



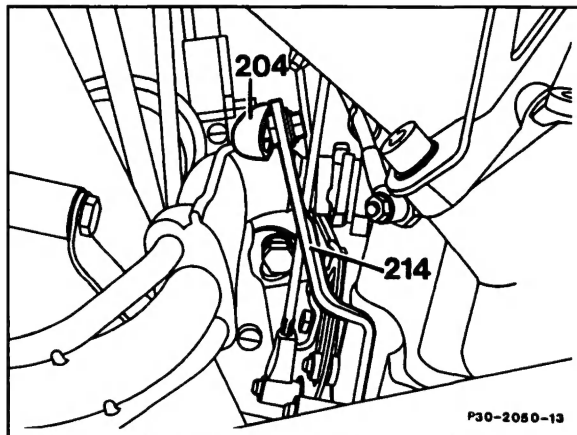
Equipment

Digital tester	Bosch MOT 001.03
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- Connect digital tester (001) and impulse transmitter (021).

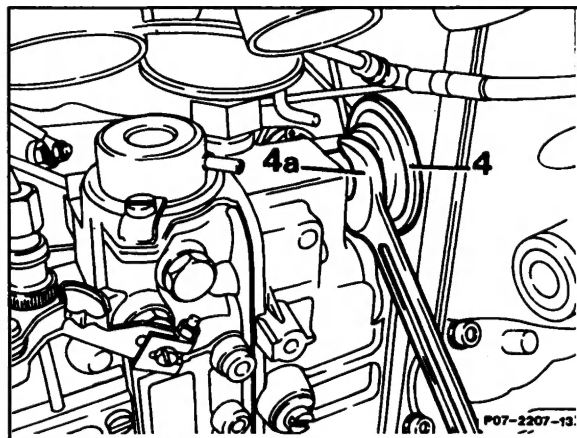


- Disengage connecting rod (204) on guide lever (214).



- Run engine to approx. 80°C coolant temperature.

- Check idle speed 750 ± 50 rpm, adjust by turning vacuum control unit (4), if required, loosen counter nut (4a) for this purpose.
- Engage connecting rod (204) free of tension.
- Switch on all additional units and check engine for smooth running.

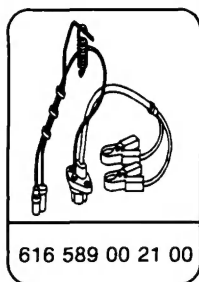


Engine 616 617.912
1981

Test values

Engine	Idle speed rpm
616.912 1981	750 ± 50
617.912 1981	750 ± 50

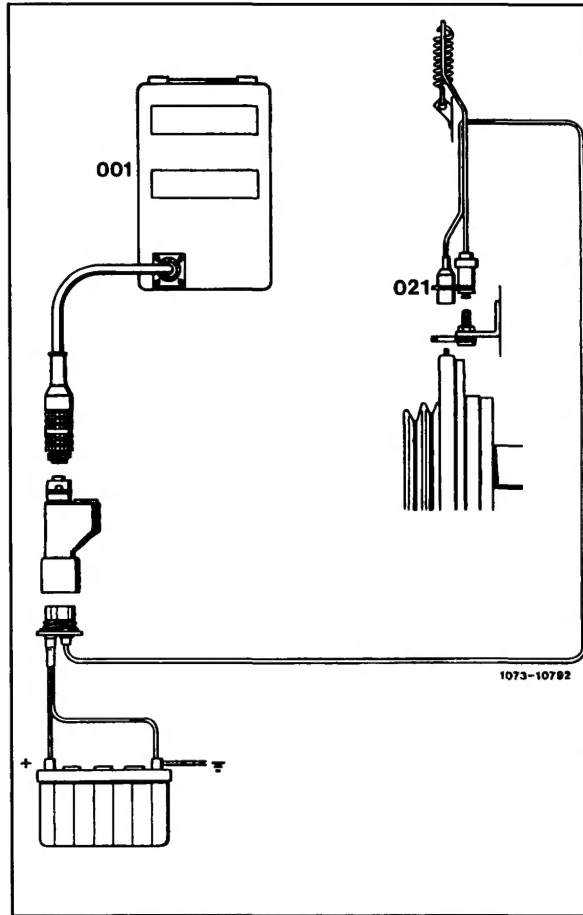
Special tool



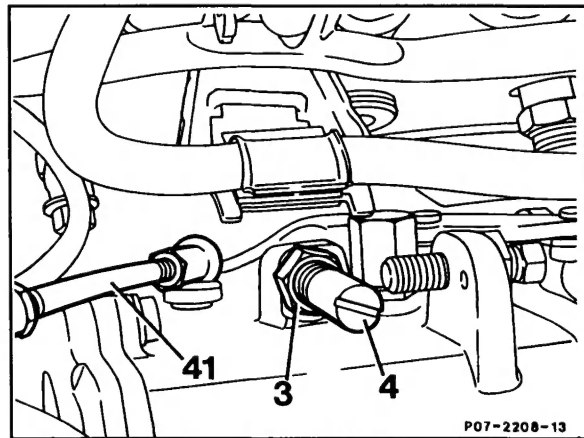
Equipment

Digital tester	Bosch MOT 001.03
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- Connect impulse transmitter (021) and digital tester (001).
- Run engine to approx. 80°C coolant temperature.
- Turn button for idle adjuster on instrument panel fully to the right.



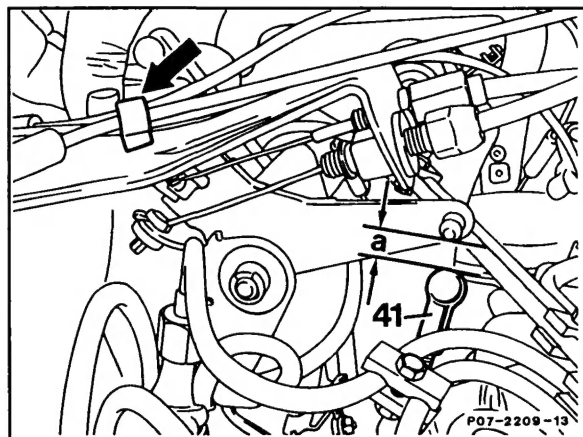
- Disconnect push rod (41) at angle lever.
- Check idle speed. If necessary, loosen lock nut (3) and adjust idle speed to specified speed of 750 ± 50 rpm with idle speed adjusting screw (4).



- Checking adjustment of regulating linkage.

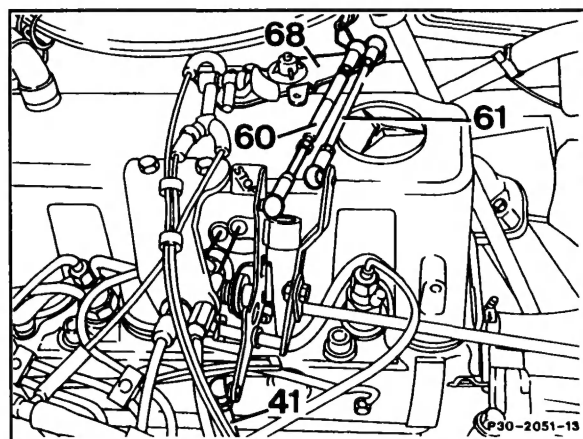
a) Vehicles with manual transmission

Adjust push rod (41) by pressing shutoff lever (arrow) against stop. Adjust push rod so that play between lower edge of ball head and upper edge of ball socket is 5-6 mm (distance "a"). Connect push rod.

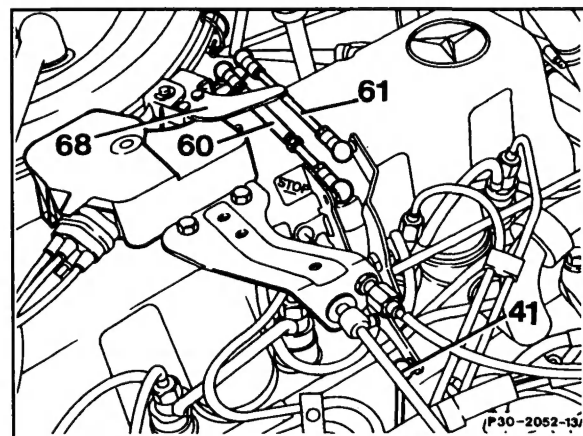


b) Vehicles with automatic transmission

Adjust push rod (41) so that reversing lever (68) just rests on perceptible selector cam leading edge. The regulating lever must also rest against the idle speed stop of the injection pump.



Engine 616

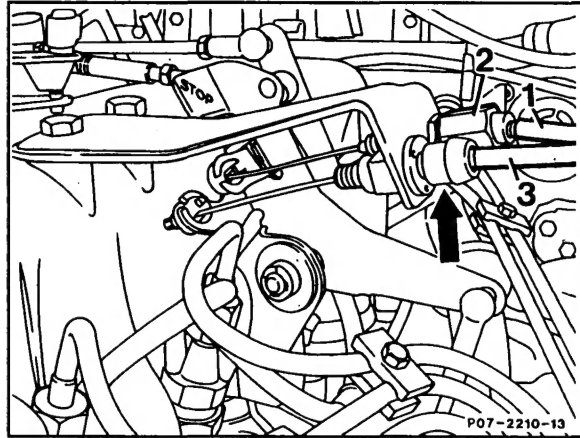


Engine 617.912

- Check Bowden cable for cruise control and adjust as necessary. Press throttle valve lever against the stop; the Bowden cable must rest free of tension against regulating lever. Adjust Bowden cable with adjusting screw if required, Release throttle valve lever (idle setting). In this position the Bowden cable must have play.
- Move selector lever to drive, switch on climate control, turn power steering to full lock. Engine should still run smoothly. Readjust speed if necessary.

**CAUTION:**

If speed is set higher, the engine will leave the idle speed control range and may accelerate up to maximum engine speed (at no load).



Engine 617.95

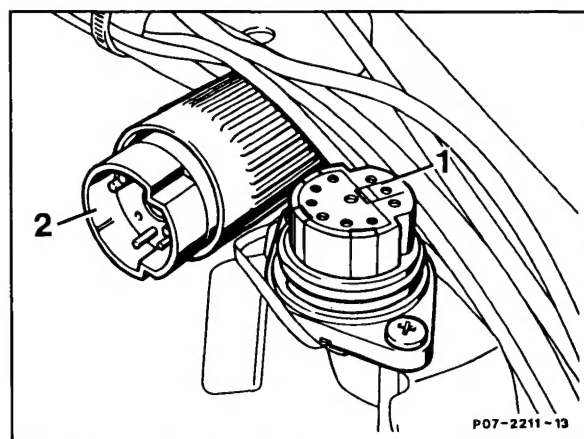
Test values

Idle speed /rpm	700 -800
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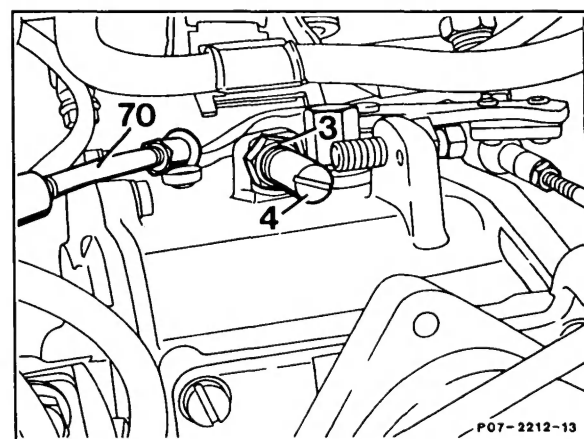
Equipment

Digital tester	e.g. Bosch, MOT 011.03
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- Connect digital tester to diagnosis socket.
- Run engine to approx. 80°C coolant temperature.

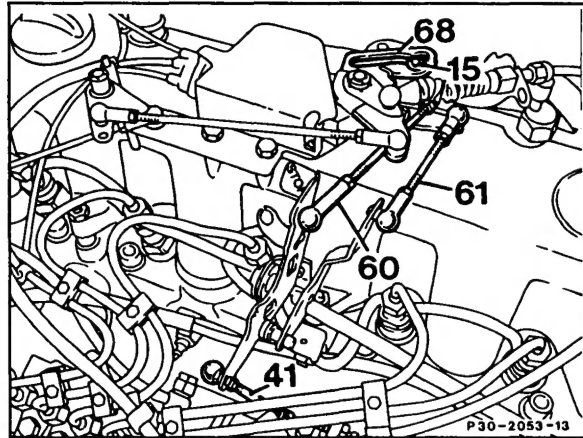


- Detach push rod (70) at angle lever.
- Check idle speed. If necessary, loosen lock nut (3) and adjust idle speed with adjusting screw (4) to a speed of 700-800 rpm.



Note: The idle speed can also be adjusted using the tachometer in the vehicle.

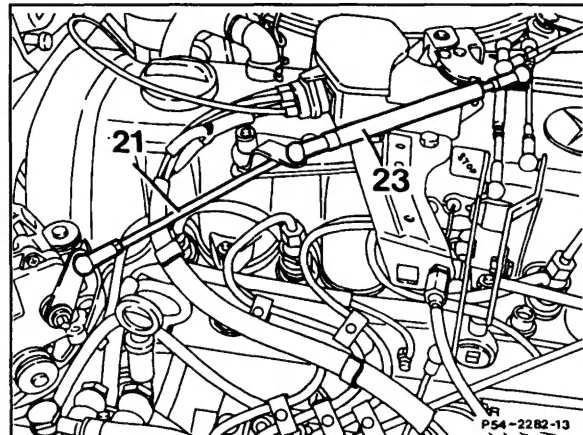
- Adjust push rod (60) so that roller (15) in reversing lever (68) rests at final stop free of tension.



- Adjust cruise control. For this purpose, detach pull rod (21) and push lever of actuating element clockwise against idle speed stop.

When connecting pull rod (21), make sure that the lever of the actuating element is pushed away from idle speed stop by approx. 1 mm. Readjust pull rod, if required.

- Move selector lever to drive, switch on automatic climate control. When power steering is turned to full lock, engine must still run smoothly. Readjust speed, if required.



⚠ CAUTION:

If speed is set higher, engine will leave idle speed control range and may increase to maximum engine speed (at no load).

Engine 616.912
1982/1983

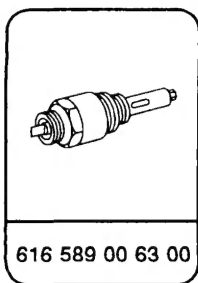
Adjust engines according to data of respective exhaust gas information plate.

Identification: Information plate on cross member in front of radiator.

Test values

Idle speed rpm	750 \pm 50
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Special tool



Commercial tools

Tachometer

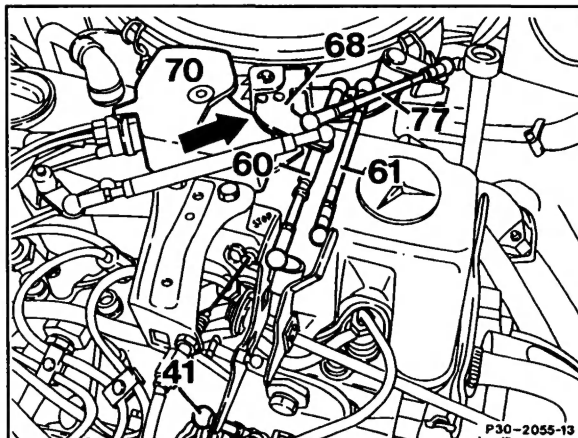
Connect tachometer and adapter.

Run engine until coolant temperature is approx.
80°C.

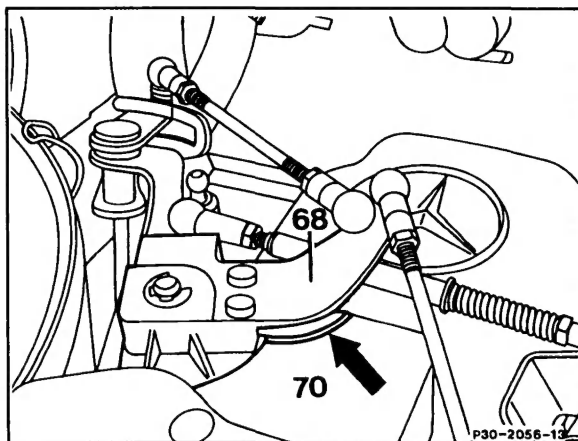
Turn knob for idle speed adjuster on instrument
panel completely to the right.

Detach pushrod (41) at angle lever.

Move guide lever (68) into idle speed position.
Set edge of lever arm of guide lever (68) to mark (arrow) of cap (70) (seen from above).



Engine 616.912 with automatic transmission

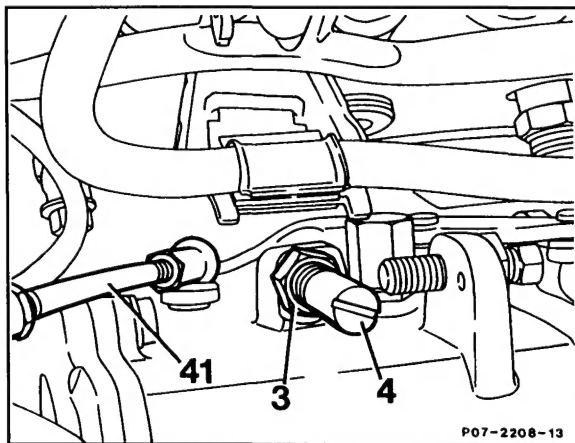


Engine 616.912 with manual transmission

If necessary, check idle speed. Loosen locknut (3) and set idle speed adjusting screw (4) to specified speed 750 ± 50 rpm.

Check adjustment of regulating linkage.

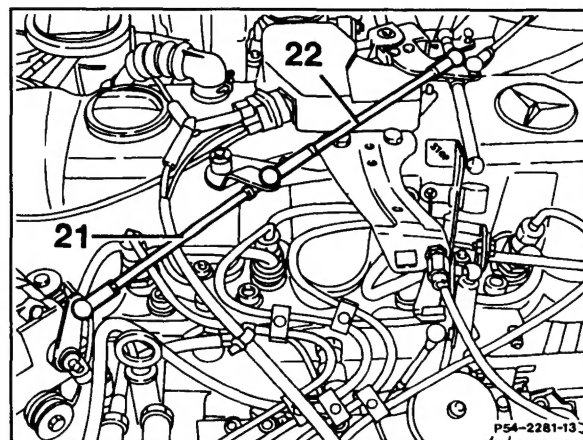
Adjust pushrod (41) and attach free of tension.
Regulating lever of injection pump should rest against idle speed stop.



Adjusting cruise control/Tempomat:

a) With manual transmission

Check connecting rod (22) for specified length of 178 mm. Detach connecting rod (21) on actuator, check whether regulation is in idle speed position. Push lever of actuator clockwise to idle speed position. Check whether connecting rod (21) is 1 mm longer than lever of actuator and adjust, if required. Attach connecting rod (21).



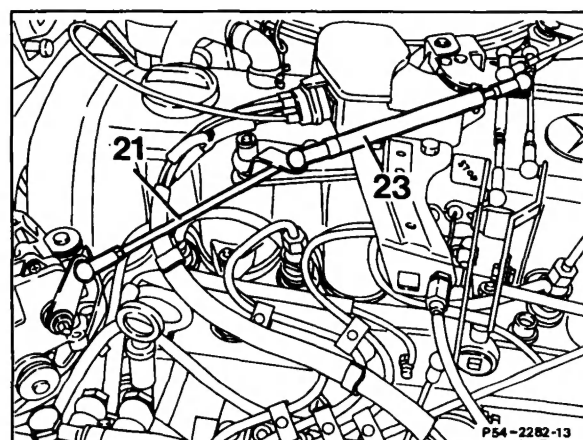
Manual transmission

b) With automatic transmission

Check pull rod (23) for specified length of 178 mm. Detach connecting rod (21) on actuator.

Check whether regulation is in idle speed position. Push lever of actuator clockwise into idle speed position.

Check whether connecting rod (21) is 1 mm longer than lever of actuator and adjust, if required. Attach connecting rod (21).



Automatic transmission